

REMARKS AND ARGUMENTS

Claims 1, 3-8 and 10 are pending in the present application, of which claims 1 and 6 are independent. No claims have been cancelled, added or amended in this paper.

Applicants thank the Examiner for the opportunity to interview this case by telephone on June 28. The undersigned and the Examiner discussed the claims in light of the Mattox references. Applicants argued that the ranges in the references were too broad to teach their invention. Agreement was not reached.

Claims 1 and 3-8 were rejected under 35 U.S.C. § 103(a) as unpatentable over Mattox '274 in view of Mattox '565 in view of Payne. Claims 1, 3-8 and 10 were rejected under 35 U.S.C. § 103(a) as unpatentable over Mattox '274 in view of Mattox '565 in view of Payne, in view of Kostansek, in view of Gerigk. Applicants respectfully traverse these rejections.

The final Office Action asserts that the amount of ingredients disclosed in the prior art "meets applicants claimed weight percents for those ingredients," i.e., the ranges overlap. "However, if the reference's disclosed range is so broad as to encompass a very large number of possible distinct compositions, this might present a situation analogous to the obviousness of a species when the prior art broadly discloses a genus." M.P.E.P. § 2144.05(I) In this case, '274 discloses 0.1-99.9% of 3-isothiazolones and 0-99.8% of an organic solvent, ranges so broad as to be meaningless, especially in light of the fact that it does not disclose an aqueous composition at all. The '565 reference is not much better, disclosing 0.01-50 parts isothiazolone, 0.0001-10 parts copper compound and optionally 40-99.9899 parts organic solvent. '565 discloses also that 0.01-30% of the organic composition may be used in an aqueous composition. A large variety of compositions can be derived from these parameters. Thus, the references disclose a genus in which the isothiazolone and solvent concentrations are very broadly defined. This is in contrast to the present claims, which disclose a species comprising a specific combination of concentrations and ingredients which has been shown to produce a stable aqueous dispersion.


"The fact that a claimed species or subgenus is encompassed by a prior art genus is not sufficient by itself to establish a *prima facie* case of obviousness." M.P.E.P. § 2144.08(II). The Office is required to "find some motivation or suggestion to make the claimed invention in light of the prior art teachings." M.P.E.P. § 2144.08(II)(A). The references disclose broad percentage ranges, but do nothing to suggest the particular combination claimed by Applicants. Applicants respectfully submit that the Office has not established a *prima facie* case because there is nothing in the references which suggests Applicants' claimed parameters or suggests that one could even prepare the claimed stabilized aqueous dispersion.

One factor in assessing motivation to select a claimed species or subgenus from a prior art genus is "the size of the prior art genus." M.P.E.P. § 2144.08(II)(A)(4)(a). One skilled in the art would need to choose from among a very large number of possible combinations in the references to produce the present claims. Therefore, Applicants respectfully submit that the rejections should be withdrawn.

Moreover, even if the Office had established a *prima facie* case of obviousness, Applicants can rebut the *prima facie* case "by showing that the claimed range achieves unexpected results." M.P.E.P. § 2144.05(III). Applicants have produced a stable aqueous dispersion containing a large amount of DCOIT, and a very low level of solvent. There is nothing in the references that teaches such a dispersion, or even suggests that it is possible. The only aqueous dispersion taught in the references is a paint formulation containing just 900 ppm (0.09%) of DCOIT, very close to the lower limit of the broad concentration range disclosed therein. Therefore, Applicants' results are unexpected based on the teachings of the prior art, and the rejection should be withdrawn for this reason as well.

Applicants believe that the foregoing arguments have overcome the rejections. However, if the Examiner has any further objections to the application, Applicants respectfully request that the Examiner contact Applicants' undersigned attorney by telephone at (847) 649-3891 to discuss the remaining issues.

Respectfully submitted,



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